Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims

Claims 1-9 (canceled).

Claim 10 (currently amended): An apparatus for substantially closing a vascular opening in a vessel while permitting post operative blood flow through [[said]] the vessel, which comprises:

a housing having proximal and distal ends, and defining a longitudinal axis;

at least two tissue engaging members disposed adjacent the distal end of the housing, [[said]] the tissue engaging members being longitudinally and reciprocally movable relative to [[said]] the housing between a retracted position and an advanced position in which the at least two tissue engaging members are at least partially exposed from the housing, the at least two tissue engaging members being adapted to cooperate to engage vascular tissue adjacent the vascular opening such that the vascular tissue is oriented in a predetermined orientation, [[said]] the tissue engaging members each having a distal segment arranged in a general hook or J-shaped configuration, [[said]] the distal segments being disposed in general diametrical opposed relation and generally curving away from the longitudinal axis when [[said]] the tissue engaging members are in [[said]] the advanced position; and

at least two jaw members connected to the housing and positioned adjacent [[said]] the tissue engaging members and being movable independently thereof, [[said]] the jaw members adapted for seizure of the vascular tissue in the predetermined orientation when in an open position of [[said]] the jaw members, drawing together the vascular tissue during closing of [[said]] the jaw members, and rendering the vascular tissue in adjacent relation when in a closed position of [[said]] the jaw members.

Claim 11 (currently amended): The apparatus of claim 10 wherein each of [[said]] the tissue engaging members is composed, in whole or in part, of a shape memory material such that [[said]] the distal segments of each of [[said]] the tissue engaging members is adapted to assume a normal unstressed condition upon deployment.

Claim 12 (currently amended): The apparatus of claim 11 wherein [[said]] the distal segment of each of [[said]] the tissue engaging members is configured in the general hook or J-shaped configuration in the normal unstressed condition.

Claim 13 (currently amended): The apparatus of claim 12 including a deployment member connected to [[said]] the tissue engaging members such that [[said]] the tissue engaging members are manually deployable to move relative to the housing to engage the vascular tissue and orient the vascular tissue in the predetermined orientation.

Claim 14 (currently amended): The apparatus of claim 10 including an elongated shaft at least partially disposed in [[said]] the housing.

Claim 15 (currently amended): The apparatus of claim 14 wherein [[said]] the elongated shaft includes a longitudinal slot for accommodating [[said]] the tissue engaging members.

Claim 16 (currently amended): The apparatus of claim 14 wherein at least one of [[said]] the jaw members includes an attachment member wherein [[said]] the attachment member serves to adjoin the tissue adjacent [[said]] the vascular opening.

Claim 17 (currently amended): The apparatus of claim 16 wherein [[said]] the attachment member is conductive.

Claim 18 (currently amended): The apparatus of claim 17 wherein [[said]] the attachment member is adapted to transmit thermal energy through application of an energy source thereto, thereby thermally fusing the vascular tissue surrounding the vascular opening.

Claim 19 (currently amended): The apparatus of claim 10 including a movable actuator connected to at least one of [[said]] the jaw members such movement of [[said]] the jaw members from [[said]] the open position to [[said]] the closed position corresponds with movement of [[said]] the actuator.

Claim 20 (currently amended): The apparatus of claim 19 further including a spring member in engagement with [[said]] the actuator to bias [[said]] the jaw members towards the closed position.

Claim 21 (currently amended) The apparatus of claim 10 wherein [[said]] the tissue engaging members include a first tissue engaging member having a distal portion curving in a first direction and a second tissue engaging member having a distal portion curving in a second direction, the first direction being opposite the second direction.

Claim 22 (currently amended): The apparatus of claim 10 wherein [[said]] the tissue engaging members each include a sharpened extreme distal end, at least the extreme distal end being disposed within the housing when [[said]] the tissue engaging members are in the retracted position.

Claim 23 (currently amended): The apparatus of claim 22 wherein [[said]] the tissue engaging members are entirely concealed within the housing when [[said]] the tissue engaging members are in the retracted position.

Claim 24 (currently amended): The apparatus of claim 16 wherein [[said]] the attachment member is configured to be received by a recess formed on [[said]] the elongated shaft to thereby define a reduced profile.

Claim 25 (currently amended): An apparatus for substantially closing a vascular opening in a vessel while permitting post operative blood flow through [[said]] the vessel, which comprises:

a housing defining a longitudinal axis;

a pair of tissue engaging members at least partially extending from the housing, the pair of tissue engaging members being longitudinally and reciprocally movable relative to [[said]] the housing between a retracted position and an advanced position, the tissue engaging members having tissue contacting segments with pointed ends adapted for positioning through the vascular opening when the tissue engaging members are in the retracted position, the tissue contacting segments having arcuate segments curving away from the longitudinal axis and in diametrical opposed relation when the tissue engaging members are in the advanced position to engage internal surfaces of the vascular tissue on opposed sides of the vascular opening to position the vascular tissue in a predetermined orientation; and

a pair of jaw members connected to the housing and disposed adjacent the tissue engaging members, the jaw members adapted for seizure of the vascular tissue in the predetermined orientation when in an open position of the jaw members, drawing together the vascular tissue during closing of the jaw members, and rendering the vascular tissue in adjacent relation when in a closed position of the jaw members, the jaw members movable independent of the tissue engaging members.

Claim 26 (previously presented): The apparatus of claim 25 including a manually operative deployment member connected to the tissue engaging members, the

manually operative deployment member movable to deploy the tissue engaging members whereby the tissue contacting segments of the tissue engaging members engage and position the vascular tissue in the predetermined orientation.

Claim 27 (previously presented): The apparatus of claim 26 wherein the tissue contacting segments of the tissue engaging members are adapted for movement in an at least radial outward direction relative to the longitudinal axis of the housing upon movement of the deployment member.

Claim 28 (previously presented): The apparatus of claim 27 wherein the tissue engaging members are further adapted for longitudinal movement from a retracted position to an advanced position to engage and orient the vascular tissue in the predetermined orientation.

Claim 29 (new): An apparatus for substantially closing a vascular opening in a vessel while permitting post operative blood flow through said vessel, which comprises:

a housing having proximal and distal ends, and defining a longitudinal axis;

at least two tissue engaging members disposed adjacent the distal end of the housing, the tissue engaging members being movable to selectively engage vascular tissue positioned adjacent the vascular opening such that the vascular tissue is oriented in a predetermined orientation; and

at least two jaw members connected to the housing and positioned adjacent the tissue engaging members, the jaw members being movable between an open position and a closed position independently of movement of the tissue engaging members, wherein, in the open position, the jaw members are configured and dimensioned to seize said vascular tissue when in the predetermined orientation, the jaw members drawing together the vascular tissue during movement from the open position to the closed position, and rendering the vascular tissue in adjacent relation when in the closed position.

Claim 30 (new): The apparatus of claim 29, wherein the tissue engaging members are selectively deployable from the housing such that the tissue engaging members are positioned beyond the distal end of the housing.

Claim 31 (new): The apparatus of claim 30, wherein each of the tissue engaging members is composed, in whole or in part, of a shape memory material such that the distal segments of each of the tissue engaging members is adapted to assume a normal unstressed condition upon deployment.

Claim 32 (new): The apparatus of claim 30, wherein the tissue engaging members are longitudinally movable relative to the housing between a retracted position and an advanced position.

Claim 33 (new): The apparatus of claim 32, wherein the tissue engaging members each include a distal segment arranged in a general hook or J-shaped configuration.

Claim 34 (new): The apparatus of claim 33, wherein the distal segments of the tissue engaging members are disposed in general diametrical opposed relation, and generally curve away from the longitudinal axis when the tissue engaging members are in the advanced position.